

**California Critical Thinking and Skills Test
A Test to Demonstrate General Education Proficiency Among Degree Graduates
Cleveland State Community College**

**Summary of Summer-Fall 2002 Results
Performance Funding Year 2002-03**

Introduction:

The Faculty of Cleveland State Community College elected to pilot the California Critical Thinking and Skills Test (CCTST) as part of its general education assessment program in Year One of the 2000-05 Performance Funding Cycle. The 45-minute multiple choice test contains 34 items intended to assess student proficiency in knowledge, evaluation, inference, and inductive and deductive reasoning. Items are not content/fact oriented, but instead they emphasize analysis and interpretation of passages and graphical information. Tests are administered by the Cleveland State Community College (CISCC) Student Development/Testing Office and scored externally by the California Academic Press. Results are provided in abbreviated form to CISCC, along with a percentile ranking allowing comparison with performance among students at similar institutions nationwide.

As an added dimension to the pilot study, college officials entered the test site at each test administration and conducted focus group discussion with the students. This assessment was to gauge student reaction to the test itself. Students also completed a brief written evaluation to document their opinions of the test.

Sample:

All students applying for Summer or Fall graduation in any degree are required to take the CCTST, unless exempted by the Vice President for Academic Affairs. In 2002, 76 students were tested at CISCC.

Results:

The testing company provided a brief report of results, limiting information to the most useful "bottom line" format, an institutional mean score for the entire test, and a statement of national percentile ranking. Components (variables) of the institutional total (mean score) were provided. California Academic Press (CAT) affirmed by telephone that national comparisons for variables are not yet available, but that their studies reveal similarities between percentiles of the total score and each variable score. This means that CISCC can assume its performance in each variable approximates the percentile earned in the total score category. CAT results are presented in Attachment 1.

The CISCC graduate mean score for 2002 was 15.747, exceeding the national mean total score (13.559) and placing at the 67th national percentile. The graduate mean score exceeded the two previous years at CISCC, demonstrating institutional effectiveness in general education outcomes. The official California Press score report follows this summary.

Student Satisfaction with CCTST

Assessment of the CCTST by tested students was pursued through paper surveys and focus group discussions at the testing site. The evaluation revealed general satisfaction with the instrument. A comparison table of the data from satisfaction surveys in 2000, 2001, and 2002 is presented in Attachment 2.

The results suggest that CISCC staff prepared well for the test administration and that most students graciously considered the test a necessary part of the institution's overall assessment program. As expected, students were not completely satisfied with the test itself; general education tests are not traditional in their construction. A few students reacted to this by showing some signs of frustration with the exercise. There seems to be a slight growth in the level of dissatisfaction with CCTST over the three years of the pilot study, but the test continues to be acceptable to the significant majority and that there is no strong evidence that students are not taking the test seriously.

The test is administered in several time slots each year and the comparison has been underway for three years. Caution was exercised in trying to use the same personnel and the same opening statements for each group. However, over a span of three years, this is not completely possible. Different greeters and "pep talks" could easily account for some variation in student enthusiasm without regard to the quality of the instrument itself. The important thing is that student attitude did not harm the score outcomes. CISCC students consistently scored in the upper 60th national percentile in all three years of the pilot project.

Summary and Conclusion:

CCTST results continue to be positive. CISCC students exceeded the national mean score and consistently placed in the upper 60's percentile in all three years of test usage. Mean scores have actually increased each year, indicating institutional improvement. Based upon these results, CISCC is providing a documented general education curriculum of high quality.

Source: California Academic Press score report. CISCC OIR; filename CISCC_1B_GenEd Pilot 02-03.doc.

Cleveland State Community College
CCTST-2K
January 2003
(complete score report as received from California Press)

Descriptive Statistics-Entire Set

Variable	N	Mean	Median	Tr Mean	StDev	SE Mean
Total	79	15.747	15.000	15.704	4.180	0.470
Anal	79	4.367	4.000	4.408	1.332	0.150
Infer	79	7.101	7.000	7.070	2.152	0.242
Eval	79	4.278	4.000	4.239	2.063	0.232
induc	79	9.456	9.000	9.423	2.566	0.289
deduc	79	6.291	6.000	6.225	2.553	0.287

Variable	Min	Max	Q1	Q3
Total	8.000	24.000	13.000	19.000
Anal	1.000	7.000	3.000	5.000
Infer	3.000	13.000	6.000	8.000
Eval	0.000	9.000	3.000	6.000
induc	4.000	15.000	7.000	11.000
deduc	2.000	12.000	4.000	8.000

Based on a Mean Score of 15.7, your group scores between the 61st and 69th percentiles as compared to a sample set of two-year college students.

Percentile scores are based on an aggregated sample of **whole-number** scores earned by students so, we cannot directly obtain the percentile score for a mean score that falls between two whole-number scores. However, using a linear continuity correction we estimate that **your group would score in the 67th percentile.**

Descriptive Statistics By Group

Group 1 = General Transfer AA and AS graduates

Group 2 = Applied Science AAS graduates

Variable	Group	N	Mean	Median	Tr Mean	StDev	SE Mean
Total	1	34	16.324	16.500	16.333	4.416	0.757
	2	45	15.311	15.000	15.244	3.988	0.594
Anal	1	34	4.559	5.000	4.667	1.307	0.224
	2	45	4.222	4.000	4.220	1.347	0.201
Infer	1	34	7.235	7.000	7.200	2.257	0.387
	2	45	7.000	7.000	6.951	2.089	0.311
Eval	1	34	4.529	5.000	4.500	2.312	0.397
	2	45	4.089	4.000	4.049	1.856	0.277
induc	1	34	9.706	9.500	9.700	2.529	0.434
	2	45	9.267	9.000	9.244	2.606	0.388
deduc	1	34	6.618	7.000	6.600	2.775	0.476
	2	45	6.044	6.000	5.951	2.374	0.354
Variable	Group		Min	Max	Q1	Q3	
Total	1		9.000	24.000	12.750	20.000	
	2		8.000	24.000	13.000	18.000	
Anal	1		1.000	6.000	4.000	6.000	
	2		1.000	7.000	3.000	5.000	
Infer	1		3.000	12.000	5.750	9.000	
	2		3.000	13.000	6.000	8.000	
Eval	1		1.000	9.000	2.750	7.000	
	2		0.000	9.000	3.000	5.000	
induc	1		6.000	14.000	7.000	12.000	
	2		4.000	15.000	7.000	11.000	
deduc	1		2.000	12.000	4.000	9.000	
	2		2.000	12.000	4.000	8.000	

Descriptive Statistics By Gender

Variable	Gender	N	Mean	Median	Tr Mean	StDev	SE Mean
Total	M	28	15.821	15.000	15.769	4.269	0.807
	F	51	15.706	16.000	15.689	4.173	0.584
Anal	M	28	4.214	4.000	4.269	1.371	0.259
	F	51	4.451	4.000	4.489	1.316	0.184
Infer	M	28	7.286	7.000	7.269	2.258	0.427
	F	51	7.000	7.000	6.933	2.107	0.295
Eval	M	28	4.321	4.000	4.308	2.310	0.437
	F	51	4.255	4.000	4.222	1.937	0.271
induc	M	28	9.536	9.000	9.500	3.049	0.576
	F	51	9.412	9.000	9.422	2.291	0.321
deduc	M	28	6.286	6.000	6.231	2.386	0.451
	F	51	6.294	6.000	6.222	2.663	0.373
Variable	Gender		Min	Max	Q1	Q3	
Total	M		9.000	24.000	12.250	19.750	
	F		8.000	24.000	13.000	19.000	
Anal	M		1.000	6.000	3.000	5.000	
	F		1.000	7.000	4.000	6.000	
Infer	M		3.000	12.000	6.000	9.000	
	F		3.000	13.000	6.000	8.000	
Eval	M		0.000	9.000	3.000	6.000	
	F		1.000	9.000	3.000	5.000	
induc	M		5.000	15.000	7.000	12.750	
	F		4.000	14.000	8.000	11.000	
deduc	M		3.000	11.000	4.000	8.000	
	F		2.000	12.000	4.000	8.000	

Performance Funding Standard 1B: Pilot Evaluations of General Education Outcomes
CISCC Student Satisfaction with California Critical Thinking and Skills Test:
Comparison for Summer and Fall Terms 2000-2001-2002

N=49 (2000); 50 (2001); 76 (2002)

Criterion	Rating (% of total response)														
	1=Poor			2			3			4			5=Excellent		
Year	2000	2001	2002	2000	2001	2002	2000	2001	2002	2000	2001	2002	2000	2001	2002
Scheduling Ease	0	2	9	2	4	4	10	24	16	10	30	26	78	40	40
Staff Attitude	0	0	0	0	2	0	2	2	3	14	30	22	84	66	75
Test Facility	0	0	0	0	4	0	2	8	4	14	32	21	84	56	72
Time Req for Test	0	0	1	6	4	7	10	14	18	20	28	37	64	50	37
Explan for Testing	0	2	1	2	0	0	6	4	5	20	20	26	72	74	68
Applic to Life Exper	2	4	4	5	12	20	33	22	36	30	50	26	30	12	10
Hold Interest/Attn	6	4	5	2	10	14	41	30	33	29	34	26	22	22	19
Wording/Structure	2	2	8	10	6	20	35	34	25	33	46	32	20	12	14
Overall Opinion	6	4	12	0	4	8	29	30	32	45	50	36	20	12	12

Criterion	No Opinion		
	2000	2001	2002
Scheduling Ease			5
Staff Attitude			0
Test Facility			0
Time Req for Test			0
Explan for Testing			0
Applic to Life Exper			4
Hold Interest/Attn			3
Wording/Structure			1
Overall Opinion			1

Source: Student Satisfaction Survey (form with written responses) conducted in testing center during each administration .